Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) The invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 1-15 and 17-19 are rejected under 35 U.S.C. 102(b) as being anticipated by Milan (US5092774).

In regards to claim 1, Milan discloses an apparatus (22) for mounting a connector to a tray comprising a rear plate ((24) of a tray, with a first rear hole (adjacent 66 on 24); a first fastener (60) mounted in the first rear hole (adjacent 66 on 24); a first spring (64) mounted on the first fastener (60); a mounting plate (25) attached to the connector (adjacent 28), wherein the mounting plate (25) is mounted on the first fastener (60) and the first spring (64) (see figures 1, 2).

In regards to claim 2, Milan discloses the apparatus (22) wherein the diameter of the first fastener (60) is smaller than the diameter of the first rear hole (adjacent 66 on 24) such that the first fastener (60) floats within the first rear hole (adjacent 66 on 24) (see figure 2).

In regards to claim 3, Milan discloses the apparatus (22) further comprising a first guide pin (50), wherein the first guide pin (50) is mounted on the mounting plate (25) (see figure 1).

In regards to claim 4, Milan discloses the apparatus (22) wherein the first guide pin (50) is mounted on the first fastener (60) so as to secure the mounting plate (25) to the first fastener (60) (see figure 1).

In regards to claim 5, Milan discloses the apparatus (22) wherein the first guide pin (50) is tapered (see figures 1, 2).

In regards to claim 6, Milan discloses the apparatus (22) wherein the first spring (64) is a coil spring (see figure 2).

In regards to claim 7, Milan discloses the apparatus (22) wherein the first spring (64) is coaxial with the first fastener (60) (see figure 2).

In regards to claim 8, Milan discloses the apparatus (22) wherein the guide pin (50) protrudes from the mounting plate (25) to a greater extent than the connector (adjacent 28) protrudes from the mounting plate (25) (see figure 1).

In regards to claim 9, Milan discloses the apparatus (22) wherein the rear plate (24) of the tray further comprises a second rear hole (adjacent 68 on 24), the apparatus (22) further comprising a second fastener (62) mounted in the second rear hole (adjacent 68 on 24); a second spring (65) mounted on the second rear hole (adjacent 68 on 24); wherein the mounting plate (25) is mounted on the first and second fasteners (60, 62) and the first and second springs (64, 65) (see figures 1, 2).

In regards to claim 10, in addition to claim 2, Milan discloses the apparatus (22) wherein the diameter of the second fastener (62) is smaller than the diameter of the second rear hole (adjacent 68 on 24) such that the second fastener (62) floats within the second rear hole (adjacent 68 on 24) (see figures 1, 2).

In regards to claim 11, Milan discloses the apparatus (22) further comprising a first guide pin (50) and a second guide pin (52), wherein the first and second guide pins (50, 52) are mounted on the mounting plate (25); and wherein the first and second guide pin (50, 52)

protrudes from the mounting plate (25) to a greater extent than the connector (adjacent 28) protrudes from the mounting plate (25) (see figures 1, 2).

In regards to claim 12, Milan discloses the apparatus (22) wherein the first and second guide pins (50, 52) are tapered (see figures 1, 2).

In regards to claim 13, Milan discloses the apparatus (22) wherein the first fastener (60) comprises a first bolt; and the second fastener (62) comprises a second bolt (see figure 2).

In regards to claim 14, Milan discloses the apparatus (22) wherein the first bolt comprises a first shoulder bolt; and said second bolt comprises a second shoulder bolt (see figure 2).

In regards to claim 15, Milan discloses the apparatus (22) wherein the mounting plate (25) comprises a first mounting hole (adjacent 56) and a second mounting hole (adjacent 58); the mounting plate (25) is mounted on the first bolt and the second bolt such that the first bolt is positioned through the first mounting hole (adjacent 56); and the second bolt is positioned through the second mounting hole (adjacent 58) (se figure 1).

In regards to claim 17, Milan discloses the apparatus (22) further comprising a guide pin block, wherein the first and second fasteners (60, 62) are mounted in the guide pin block (26); and the guide pin block (26) is mounted to the rear plate (24) (see figures 1, 2).

In regards to claim 18, Milan discloses the apparatus (22) further comprising first and second guide holes (adjacent 50, 52) located on the mounting plate (25) (see figure 1).

In regards to claim 19, Milan discloses the apparatus (22) wherein the first and second guide holes (adjacent 50, 52) are located astride the connector (adjacent 28) (see figures 1, 2).

7. Claims 20-23 are rejected under 35 U.S.C. 102(b) as being anticipated by Nations (US391091).

In regards to claim 20, Nations discloses a module (22) for insertion into a tray, the module (22) comprising a connector (2) at the rear of the module (22), a first guide pin (6) (see figure 1). A first guide hole (on a tray) and a corresponding connector located on a tray are not positive recited in the claim.

In regards to claim 21, Nations discloses the module (22) further comprising the first and second guide pins (6) (see figure 1). A first and second guide hole (on a tray) and a corresponding connector located on a tray are not positive recited in the claim.

In regards to claim 22, Nations discloses the module (22) for insertion into a tray, the module (22) comprising, a connector (2) at the rear of the module (22); a first guide pin (6) located in proximity to the connector (2); the first guide pin (6) (see figure 1). A first guide hole (on a tray) and a corresponding connector located on a tray are not positive recited in the claim.

In regards to claim 23, Nations discloses the module (22) further comprising, a second guide pin (6) wherein the first and second guide pins (6) are astride the connector (2); the first and second guide pins (6) are each located in proximity to the connector (2) (see figure 1). A first and second guide hole (on a tray) and a corresponding connector located on a tray are not positive recited in the claim.

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

9. Claims 24-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bittihn et al (US5538809) in view of Briggs et al (US5125849).

In regards to claims 24 and 26, Bittihn discloses the method comprising the steps of providing a tray, wherein the tray includes a mating connector (12, 13, 14, 15, 16), wherein the mating connector (12, 13, 14, 15, 16) is coupled to the tray by at least one spring (18) and wherein the mating connector (12, 13, 14, 15, 16) is mounted between first and second guide pins (11) (see figure 2). Bittihn lacks a module. However, Briggs teaches a module (12) includes first and second guide holes (30) astride a first connector (14) (see figure 1). It would have been obvious to one having ordinary skill at the time the invention was made to modify the method of mounting a mating connector in a tray of Bittihn by providing an inserting module as taught by Briggs to align with a mating connector by a spring through the first and second guide holes coupling with the first and second guide pins.

In regards to claims 25 and 27, it would have been obvious to one having ordinary skill at the time the invention was made to modify the method of mounting a mating connector in a tray of Bittihn by providing an inserting module as taught by Briggs for mating the mating connector to the first connector by a sufficient force provided by a spring on the mating connector.

Allowable Subject Matter

10. Claim 16 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

11. The following is a statement of reasons for the indication of allowable subject matter: